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| Total marks | 14 |
| Time allowed | Approximately 25 minutes |
| Instructions | Answer ALL questions. Write answers in the spaces provided. |

Question 1

Each food sample was tested using four different reagents. The results are recorded below.

| Food sample | Benedict's test | Iodine test | Biuret test | Ethanol emulsion test |
|-------------|------------------|--------------|------------------|-----------------------|
| A | Blue (no change) | Blue-black | Blue (no change) | Clear |
| B | Brick red | Orange-brown | Purple | Milky white |
| C | Blue (no change) | Orange-brown | Purple | Clear |
| D | Blue (no change) | Orange-brown | Blue (no change) | Milky white |

A student tests four unknown food samples (A, B, C, D) for the presence of starch, glucose, protein and lipid. The table shows the results.

[0 marks]

Question 2

Using the results table, identify which food molecules are present in sample B.

[3 marks]

Question 3

A student says: "Sample A must contain only starch." Evaluate this claim.

[3 marks]

Question 4

Describe how the student would carry out the Benedict's test for glucose. Include what a positive result looks like.

[4 marks]

